

AD-A101 652 ARMY WAR COLL CARLISLE BARRACKS PA
LIBYAN MILITARY POWER PROJECTION IN SUB-SAHARAN AREA. (U)
JUN 81 X T DELOF

F/6 5/4

UNCLASSIFIED

NL

1 of 1
AD-A
101-652

END
DATE FILMED
8-81
DTIC

ADA101652

LEVEL II

1

STUDY
PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

12 JUNE 1981

LIBYAN MILITARY POWER PROJECTION IN SUB-SAHARAN AREA

by

Colonel Xavier Turbet Delof
International Fellow, France

DTIC FILE COPY.



DTIC
ELECTED
JUL 21 1981
S D
D

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013

Approved for public release;
Distribution unlimited.

B5

81 7 17 115

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Avail and/or	
Dist	Special

R

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

12 JUNE 1981

STUDY PROJECT

LIBYAN MILITARY POWER PROJECTION IN SUB-SAHARAN AREA

by

Colonel Xavier Turbet Delof
International Fellow, France



US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013

Approved for public release;
distribution unlimited.

DTIC
ELECTED
JUL 21 1981

D

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
		AD-A101652
4. TITLE (and Subtitle)	5. TYPE OF REPORT & PERIOD COVERED	
LIBYAN MILITARY POWER PROJECTION IN SUB-SAHARAN AREA,		
7. AUTHOR(s)	6. PERFORMING ORG. REPORT NUMBER	
COL Xavier Turbet/Delof 10)	(12) 69	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	8. CONTRACT OR GRANT NUMBER(s)	
US Army War College Carlisle Barracks, PA 17013		
11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE	
(11)	12 June 1981	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	13. NUMBER OF PAGES	
	62	
16. DISTRIBUTION STATEMENT (of this Report)	15. SECURITY CLASS. (of this report)	
	Unclassified	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)	<p>This study is designed to determine Libya's status as a military power and if by itself or as a foreign proxy, it could be able to project this power in the sub-Saharan area. The terrorism problem will not be studied unless it facilitates the comprehension of a specific action or hypothesis.</p> <p>This topic reports events of the present-day situation. Therefore, many sources of information come from newspaper writers and despite the fact they have been compared from several origins, they must be understood "reportedly." However, this has no influence on the general thesis.</p>	

403565 SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

unclassified

USAWC MILITARY STUDIES PROGRAM PAPER

LIBYAN MILITARY POWER PROJECTION IN SUB-SAHARAN AREA
INDIVIDUAL STUDY PROJECT

by

Colonel Xavier Turret Delof
International Fellow, France

US Army War College
Carlisle Barracks, Pennsylvania 17013
12 June 1981

Approved for public release;
distribution unlimited.

The views expressed in this document are those of the author and do not necessarily reflect the official policy or position of the War College or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

AUTHOR(S): Turbet Delof, COL, France

TITLE: Libyan Military Power Projection in Sub-Saharan Area

FORMAT: Individual Study Project

DATE: 12 June 1981 PAGES: 66 CLASSIFICATION: Unclassified

This study is designed to determine Libya's status as a military power and, if by itself or as a foreign proxy, it could be able to project this power in the sub-Saharan area. The terrorism problem will not be studied unless it facilitates the comprehension of a specific action or hypothesis.

This topic reports events of the present-day situation. Therefore, many sources of information come from newspaper writers and despite the fact they have been compared from several origins, they must be understood "reportedly." However, this has no influence on the general thesis.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
LIST OF TABLES	iii
CHAPTER I. INTRODUCTION	1
II. LIBYA	3
Libya's Geographical Environment	3
Libyan Background	4
History	4
Geography	5
Population	6
Economy	7
Capabilities	7
III. QADDAFI	9
Unpredictable	9
Pragmatic	9
Has Popular Support	10
IV. AFRICA AND THE BIG POWERS	11
USA	11
France	11
USSR	12
USSR Strategy	12
Shoba Example	13
Libya and North Africa	14
Algeria	15
Tunisia	15
Egypt	16
V. NIGER	18
Population	19
Economy	20
Present-Day Situation	20
Libya and Niger	21
VI. CHAD	23
The Military Balance 1980-1981	23
Geography	24
Population	24
Economy	25
Present-Day Chad	25
VII. NIGERIA	27
The Military Balance 1980-1981	27
Geography	27
Population	28
Economy	29
Nigeria and Libya	29
VIII. DEMOCRATIC REPUBLIC OF SUDAN	31
The Military Balance 1980-1981	31
Geography	31
Population	32
Economy	32
Sudan and Libya	33

TABLE OF CONTENTS (Continued)

	Page
CHAPTER IX. TOOL OF LIBYAN EXPANSIONISM	35
The Modern Armed Forces	36
Strength of the Armed Forces	37
Combat Value of these Forces	37
Chad Seizure	38
X. INTERIOR LIBYAN SITUATION	40
XI. POSSIBLE MILITARY ACTIONS	42
Mandatory Factors for Sub-Saharan Warfare	42
Libya Lacks Several Factors	42
Modes of Action	43
General Warfare	43
Limited Intervention	44
Armed Intervention Type Chad	44
Interior and International Conditions	
for a Military Intervention	45
Interior Conditions	45
International Conditions	46
Conclusion	47
SELECTED BIBLIOGRAPHY	50
APPENDIX 1.	
1. Map--Libya's Geographical Environment	53
2. Libyan History	54
3. Map--Military Presence(France/Warsaw Pact)	57
4. Map--Military Presence (USSR)	58
5. (A) Strength of the Armed Forces	59
(B) The Military Balance 1980-1981 (Libya)	60
6. Libyan Airlift Capacities	61
DISTRIBUTION	62

CHAPTER I

INTRODUCTION

Since 1969, modern Libya has had a worldwide importance unrelated to its size and its capabilities. Presently, it keeps everyone and every country at any time expecting its unexpected decisions. Coming from nearly nothing after centuries of foreign domination, it gained access to the international stage thanks to two phenomena occurring in a worldwide turmoil:

-- Oil

-- Colonel Qaddafi

One without the other does not represent something very important; but together, they constitute an explosive mixture.

In the present-day situation, one can imagine or foresee Libya, or better Qaddafi, backing every extraordinary action aiming to destabilize a country--terrorism, attempted coups, etc. Until now, Qaddafi had carried out few things except by indirect actions such as unrests, assassinations, international terrorism, arms supplies and verbal threats.

A new fact in the late 1980 and early 1981 period enlightened his African ambitions when he helped Goukhouni Woddei to take over the whole of Chad. This action makes many other former threats more concrete. It was the first success of a Libyan direct military action achieved with an organized army, logistics and modern weapons after many failures in either military or political areas. From that, everyone foresees new conquests and new capabilities towards sub-Saharan Africa on behalf of Qadaffi himself or Russia. Now Qaddafi seems able to conquer the Sudan, Central African Republic, Cameroon, Gabon, Niger or to reach the Atlantic Ocean through Nigeria. His threat to

constitute a Sahelian state happens to be credible. One pays attention to his great design to unify all the Arabic world.

Can such a thing happen? And how could a military power in this area be projected? These questions can be followed by two others:

-- Is the Libyan problem only Qaddafi?

-- Or the will of its whole population?

In the first case, the potential threat could decrease after Qaddafi because of the country's entering a new era of necessary consolidation of prosperity, research of an after-oil period which would not fit in with a military adventure. On the other hand, the Libyan people could try again and again to project their military power and export either their ideals or their problems.

CHAPTER II

LIBYA

LIBYA'S GEOGRAPHICAL ENVIRONMENT (See map at Appendix 1)

Libya is in a geographical environment that includes North Africa, Sahara and the sub-Saharan area. In the course of this topic, we shall have to speak frequently of this specific environment. Thus, it seems better to have a general assessment of this area including North Africa before starting this subject.

Considered as a whole, the northern half of Africa can be divided into three main parts from north to south (equator).

In the north, is a narrow strip where are gathered most of the inhabitants with their economic centers. This strip is either narrower or wider according to the countries. Only two very small areas along the coast, separated by a large semi-desert area, belong to Libya.

In the center, is an area composed of either a huge desert or semi-desert with very few, or none at all, inhabitants. There are few resources except in some places which have raw materials (mainly oil and uranium).

In the south, is again a fertile area of very unequal, workable surfaces where, again, are found both population and economic centers.

Looking carefully at the map, we can compare North Africa to an island isolated by the Mediterranean Sea on one side and the Sahara on the other side. This leads us to two more conclusions.

Egypt and the Sudan constitute a peculiar case because of the Nile which creates a natural linkage between both countries; and where there is a natural linkage, we can find possible contacts in many different spheres, economical, political, ethical, cultural, etc.

Unlike the Mediterranean Sea which constitutes a wealthy source for maritime countries, the Sahara, which is two and a half times as wide as the Mediterranean Sea, separates significantly North Africa and the sub-Saharan countries. We have to keep in mind these particular geographical features when discussing the strategic and military point of view.

LIBYAN BACKGROUND

History

The highlights of Libyan history are recalled in Appendix II and show that Libya has a long tradition of guerilla warfare but very little offensive warfare and conquest having been dominated by many invaders until the 6th century.

The Berber cultural substratum was totally submerged in Libya in the ninth and tenth centuries by large-scale immigration of Arabic-speaking, nomadic tribes from central Arabia. That explains the heavy Arabic feeling of the modern inhabitants. It may be said of numerous areas that except for Arabic not many parts of the Arab world are more genuinely Arab in ethnic terms.

From the 11th century, another invasion dispersed the populations of this area into a severely fragmented tribal society living in a semi-nomadic subsistence economy until the 13th century.

Thus this country had only the Arab ethnic tradition and the Ottoman occupation did not help them to feel like a nation. This feeling appeared only with the Janussi religious brotherhood in 1936. The first national feeling was developed through the anti-Italian guerilla war backed by Turkish officers in 1911/1917. The Italians were successfully confined to coastal towns until the arrival of Mussolini. The new Libyan governor, Count Volpi, by 1931 had pacified Libya after having occupied the main Janussi bases in

the oases, built a barbed wire fence along the Egyptian border and put some tribes into concentration camps.

We can see from this history that Libya was attacked or was invaded from the east (Egypt, Arabia), west (Tunisia, Spain), and north (Italy), but there was no attack from or conquest to the south because of the Saharan barrier. Its unity was won mainly against the western world (Italy) with its different culture and religion.

The present-day adventure represents something quite new with a modern offensive warfare and an expansionist will towards the south.

Geography

Geographically, Libya remains a small country without a specific unity. Both geographically and economically, Libya will be studied only as far as military power is concerned. Libya spreads over 680,000 sq. miles, nearly three times the area of Texas. Its position can make it either a country from Maghrib (west North Africa) or from Mashriq (east North Africa). This situation places it in a linkage position between these two areas and sub-Saharan Africa.

Its population of about 3,000,000 people, the smallest on the African continent, is gathered mainly along the Mediterranean coast in two areas separated by the 400-mile wide gulf of Sidra to the desert of Sirtica. It can be divided into three physical and administrative main areas: Tripolitania, Cyrenaica and Fezzan which is mostly desert. Its borders are composed of:

-- Maritime Coast: 1,200 miles.

-- Ground borders (most of them including desert areas): Tunisia, 285 miles long; Algeria, 700 miles long; Niger, 250 miles long; Chad, 750 miles long; Sudan, 300 miles long; Egypt, 700 miles long.

Two features dominate in its geography and have a strong influence on the regional development and the historical trends:

-- Mediterranean influence predominates only along two narrow coastal enclaves.

-- The other parts of Libya are constituted of the desert of Sirtica and the Sahara that did not allow development of the central areas.

The area economically useful is only 5 percent out of which only 1 percent is suitable for permanent cultivation. However, some underground lakes of water were discovered near Kufrah oases which led Qaddafi to undertake agricultural development in this area.

Population

The population was unprepared for the modern world. They are by nature tradesmen and are pulled both by modern requirements and Qaddafi's ambitions.

Following a normal process as in industrialized countries, the population has become increasingly urbanized around Tripoli and Benghazi for a better life. The growth rate is very high (if the census can be trusted): 6.5 percent in the late 1960s and 3.6 to 3.7 percent in the 1970s. The present government policy is to try to curb the rural to urban immigration by extending the irrigation program in the countryside.

Libyan people are historically, by temperament and by tradition, tradesmen rather than warriors. But a high rate of unemployment among a superabundance of youth can modify this situation. In addition to this, the main feature of this population is that they are largely semiskilled or unskilled. Workers can be classified as follows: 1/2 service sector; 1/3 agriculture; 1/8 construction; and the rest mining or manufacturing. That can explain the high rate of unemployment in such a country (7 percent) and the number of foreigners filling the skilled jobs. They occupy about

68 percent of the professional fields (230,000 out of 950,000 workers).

This trend can be changed but will take a long time because of the Libyan personnel showing a slow progress in educational and vocational training programs and a negative attitude towards technical occupations. However, many Libyan students (reportedly 15,000) are in the U.S.A. and in the near future, could give Libya a larger number of highly qualified people.

Economy

On an economic level, Libya is both very poor and very wealthy. Its oil provides Libya with all the necessary money to make it one of the most independent countries in the world and to undertake many different actions:

-- Economic development of agriculture within the short range; then, extra chemical and steel industry within the long range.

-- International actions of interventionism, even expansionism.

Despite this wealth, Libya is a poor country which depends heavily upon importation for everything except oil and gas. Three specific facts enlighten this situation:

-- Importation of food is increasing.

-- Added value to manufactured goods was in 1977 one hundred million dollars which is just a little more than Senegal.

-- Many foreign workers occupy civilian and military qualified positions.

Capabilities

Thus Libya can afford many sorts of developments for expansion within the country to meet the future challenges for military expansionist adventure. Everything relies upon the leader.

These considerations lead to two opposite trends:

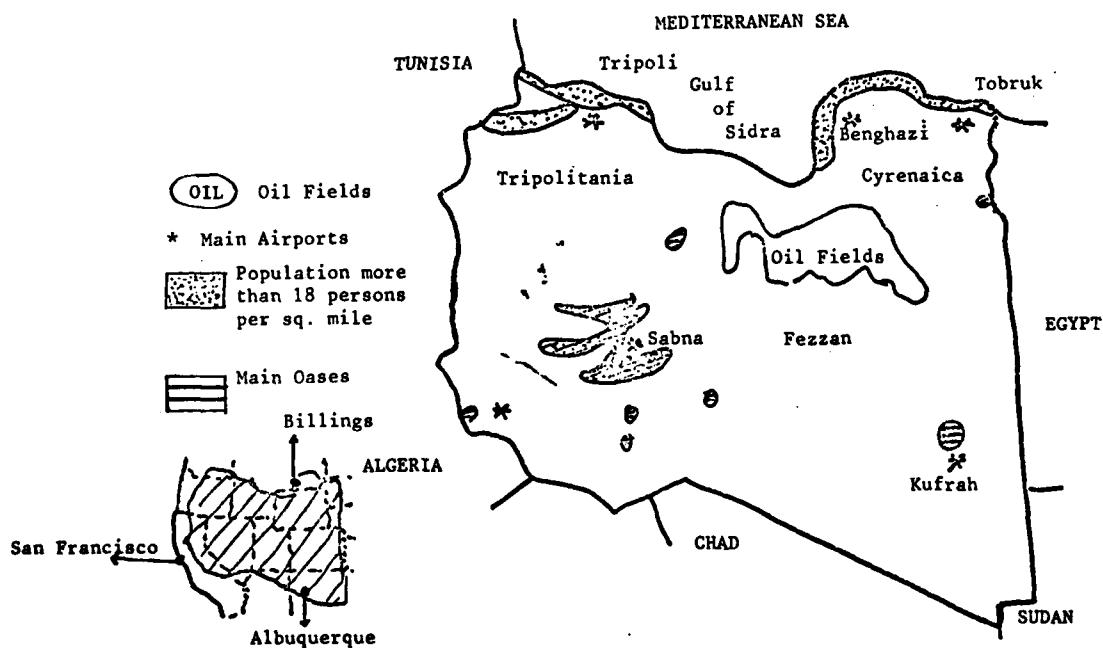
-- Very wealthy and very poor, it can afford some outside adventure

and especially export any ideology by terrorism or war thanks to its money and its unemployment,

-- But it has to achieve its own development to fulfill the naturally increasing requirements of its population and to prepare for the post-oil Libya with skilled people and a strong industry.

Geographically it looks to the north, east or west but few military adventures seem possible in this direction for so small a country. One direction is available--south. But the cost would be high because of the Sahara obstacle and it would require important skilled strength, and at what point will Libya, because of its oil wealth, remain independant from big powers.

LIBYA



CHAPTER III

QADDAFI

As stated earlier, Libya could be defined through its oil and Qaddafi. The economic power of a nation does not depend upon one man but the projection of a military power does; then, it is necessary to study "who is Qaddafi?"

UNPREDICTABLE

Both fanatic and pragmatic, Qaddafi is unpredictable. He has been called by many names that can describe him in a very sharp way: zealot, maniac depressive, combination of Robin Hood and John Calvin, number one Kremlin agent, etc. At the same time, illuminated, pragmatic, boastful, until now no one has had the feeling that he could understand his personality.

As Nasser's disciple, he adopted his pan-Arab socialism and his choice shows clearly the way to follow: first, Islam; second, Arab unity. He defined it in his book, The Third International Theory. Neither capitalist nor Marxist, this theory wants to bring a middle choice for Arabic people.

Vehemently anti-Marxist, he bargains with the Soviet Union because he needs her. For him, she is now the only reliable power for weapons and parts supply. This alliance goes on despite the bitter fanaticism of Qaddafi and the declaration of the "Third International Theory." That considers the Soviet Union "anti to Moslem and imperialist" and claims that the Moslem revival requires a world revolution to contain and then eliminate Communism and capitalism.

PRAGMATIC

However, it is possible to foresee that some actions Qaddafi offers are

paradoxical and it is impossible to foresee his future actions. Except for terrorist actions and the recent takeover of Chad, he failed nearly everything he tried: alliances with Egypt, Tunisia, P.L.O., armed actions in Uganda, unrests in Gambia, Niger, etc.

Allied with Russia, he does not like anything from Russia. He is for private property and free enterprise. As a brother of the Arab countries, he believes that the failure of Arab power comes from the traditional responsibles and arrogance of Arab dynasties (present kings and felonious leaders prevent its raising up he claims).

HAS POPULAR SUPPORT

Despite failures and paradoxes, he has popular support, but for how long? Any leader in any other country would have been put aside after so many failures and such strange behavior inside and outside the country. He maintains himself as a leader thanks to his armed forces, the incredible economical prosperity of the country and the personal example he gives the population, and mainly the young people, of pure disinterest vis-à-vis this world's advantages.

But on an international level, he does not use any normal policy, ignores the signals, adopts his behavior according to the circumstances sometimes unrelated with his own feelings. Such an unpredictable man is ready for any military adventure if he has the necessary manpower and weapons and as long as he feels seriously threatened in this complicated world where stability and destability can be confounded. Maybe the answer can come only from the inside by the lack of popular support that may be seen in the very near future.

CHAPTER IV

AFRICA AND THE BIG POWERS

In the present-day world, every piece of the international puzzle is related to all the others and mainly with the superpowers. Thus, it seems necessary to study Libya's position in this puzzle. Therefore, we have to extend this study to the whole of Africa to understand what Libya should be able to do or asked to do.

USA

Unlike the USSR, the USA did not take great interest in Africa for a long time. In 1963, the Clay report suggested that US aid to Africa should be gradually eliminated because Africa was too far removed from the US-Allied containment area adjacent to the Soviet perimeter, and that the West European countries would have to bear most of the necessary aid burden. In 1966 another report presented to President Johnson by US Ambassador to Ethiopia made the statement that US aid should become a bilateral program. Because of the tendency of these countries to increase their military establishments, the USA was hostile to an arms program.

In the mid-70s, the US presence suffered from a deliberate US policy to reduce or downgrade their military presence abroad.

FRANCE

Another western country, France, is involved in many African countries on a military level. The map, Appendix III, shows the comparison between the USSR or USSR proxy military presence and the French military presence.

The recent Chad problem has clearly demonstrated the limitations of any military action. On a political level, France was asked by both Chadian leaders to withdraw from their country as France had no legal right to stay there.

On a military level, weaponry of some African countries, and particularly Libya, is composed of many modern weapons such as medium tanks, guns, anti-aircraft weapons, aircraft, etc. In view of such a threat, any supporting power of an African state should set up a powerful military establishment if any help is required from this state. That could be a heavy requirement.

USSR

The USSR policy is pragmatic and coherent and aims to spread her influence over the whole continent. (See map, Appendix IV) The USSR was interested in Africa as early as 1960 and followed since this time a coherent policy reaching to south Africa along the coast. She needs Africa and its ports because of her accession to a worldwide maritime power and her future needs in raw materials.

She demonstrated her pragmatism proceeding on her "conquests" despite numerous failures (e.g., Egypt 1972, Somalia, Uganda, etc.). In the mosaic of contradictory interests and alliances, she has chosen to occupy as soon as possible all the available positions and then give a selected aid against precise agreements not to repeat the Egyptian failure.

USSR Strategy

USSR strategy has a rigorous coherence defined by peaceful coexistence and its four regulations:

-- Refusal of war as a solution to rule the social systems and particularly non-interference in internal policies.

-- Maintenance of ideological war.

-- Booster of proletarian struggle.

-- Support of national liberation efforts (irregardless of the regime).

Opportunism and prudence are in Africa, as in the other parts of the world, the master words of the USSR policy. She does not want to create conflicts but she exploits all the favorable situations giving up any dangerous one such as when a Communist soldier can directly confront a western world soldier. This policy and particularly the direct military intervention in Angola and Ethiopia gave them numerous successes and proved to African countries that the USSR was ready to give help nearly without limit.

This brief study illustrates perfectly the Russian policy in this area. She has no colonial experience and sets up in African countries with great difficulties despite favorable feelings because of her non-colonialization background. But she has committed enormous errors vis-à-vis the country to be seized and international opinion.

Cuba is used in Angola and Ethiopia. That means the southern and eastern part of Africa. Libya could be the one necessary either to extend Communist influence in the north or the sub-Sahara Africa or to surround Egypt through Sudan.

Shaba Example

Shaba expedition (Zaire) can demonstrate how Russians, or a Russian proxy, are able to work. The Shaba invasion was decided on March 1978 during a secret meeting in Ouargla (Algeria). The president was an Algerian man but with Soviet, Cuban or East German advisors.

The goal was:

- First, eliminate President Mobutu.

- Second, take over (bloodless) Shaba province.
- Third, settle a Zaire popular government.

To proceed on by:

- "Socialist" organization.
- Organization of one party.
- Socialization of the whole country narrowly bound with the

Soviet Union.

As regards Libya, each protagonist (Libya and Russia) needs the other one. Unlike many other countries, Libya does not need any economical aid, but only military aid. That makes it free to withdraw from the present agreement as soon as the respective goals are opposed. On the other hand, Russia can stop her aid at any time if Qaddafi adventurism happens to threat peaceful coexistence.

LIBYA AND NORTH AFRICA

Libya is surrounded by six countries. The boundaries were established before independence was granted to it through a series of agreements with the Ottoman Empire, France, Great Britain and Italy. If Qaddafi wants to use his strength against his neighbor, that can provide him with many pretexts if he needs any.

Then furthermore, it seems necessary to study briefly all the countries surrounding Libya by insisting upon the present-day relation between Libya and this country and of what interest its capture, if possible, could be for Libya.

Most of the borders are long, almost straight, including many small oases inhabited by settled communities.

This study will look first at the North African countries in very broad terms. They are not part of the subject but it seems impossible to exclude them completely.

ALGERIA

The border was drawn first by the French-Libyan treaty of 1955 and modified in 1956 for the benefit of Algeria (France) including some rich oil areas discovered soon after. That created some anger from Libyan leaders but the disproportion of forces did not allow any offensive action from Libya.

Algeria did not come out against the Chad-Libyan merger and signed an alliance treaty in Hassi Messaoud in 1975. However, it must follow carefully the evolution of the situation in the sub-Saharan area because of its project of road liaison from this area to the Mediterranean Sea through Niger.

TUNISIA

In September 1973, the Tunisian president, Bourguiba, floated ideas for a united states of North Africa (Tunisia, Libya, Algeria, Mauritania). Thus, he appears to be the most serious political rival of Qaddafi since he is considered by many as the leading politician in Naghib. He differs markedly from the Libyan leader in his view of Islam and Arab unity.

The attempted coup in Gafsa, a Libya proxy, followed the failure of an alliance treaty. It showed the French determination to support Tunisia. Algeria could not have remained indifferent in view of a direct armed action. Nor could all the other Arab countries including Egypt. Therefore, such an action before Bourguiba disappears seems possible but difficult.

EGYPT

Many cases of conflict exist between Libya and Egypt. Qaddafi, a Nasser disciple, wanted with passion an alliance-merger between both countries. The failure of these goals and Sadat's attitude towards Israel turned the friendship into a bitter anger and led to a short war. The Libyan and Egyptian armies were engaged in July 1977 and in 1978 in brief cross-border fighting. Egypt only wanted to punish Libya and show its determination. The battle was brief and was everywhere to the advantage of the Egyptians. Presently, Egypt has about 100,000 troops stationed along the Libyan border. That is more than enough.

Egypt and Libya can challenge one another in several other areas:

--Regarding the Chadian-Libyan merger, Sadat has not yet said his "last word" and could provide military assistance to the defeated Hissene Habre (through Sudan).

-- Regarding Sudan, Egypt is ready to support militarily Sudan but seems reluctant to strike Libya, as she did in the summer of 1977, while Qaddafi is busy consolidating his position in Chad because of three major points:

- Lessons from the bitter experience of armed intervention in Yemen led Egypt to restrain committing armed forces to defend Egypt's friends.

- Direct military intervention could lead to an escalation able to spread the conflict and endanger the entire horn of Africa. Egypt has already advised Sudan, Somalia and Ethiopia to remain neutral.

- The involvement of the Sudanese armed forces in a long border war with Libyan and Soviet-proxy troops could weaken the Sudanese regime and help Libya's and Russia's ambitions.

Therefore, a mutual agreement based on the strength of Egyptian armed forces on one hand and the wise Sadat's attitude on the other hand makes unlikely a direct armed conflict between Libya and Egypt, two Arabian countries, in the present-day situation. However, this situation could evolve very quickly and compels Libya to maintain a military establishment on the border.

CHAPTER V

NIGER

THE MILITARY BALANCE 1980-1981

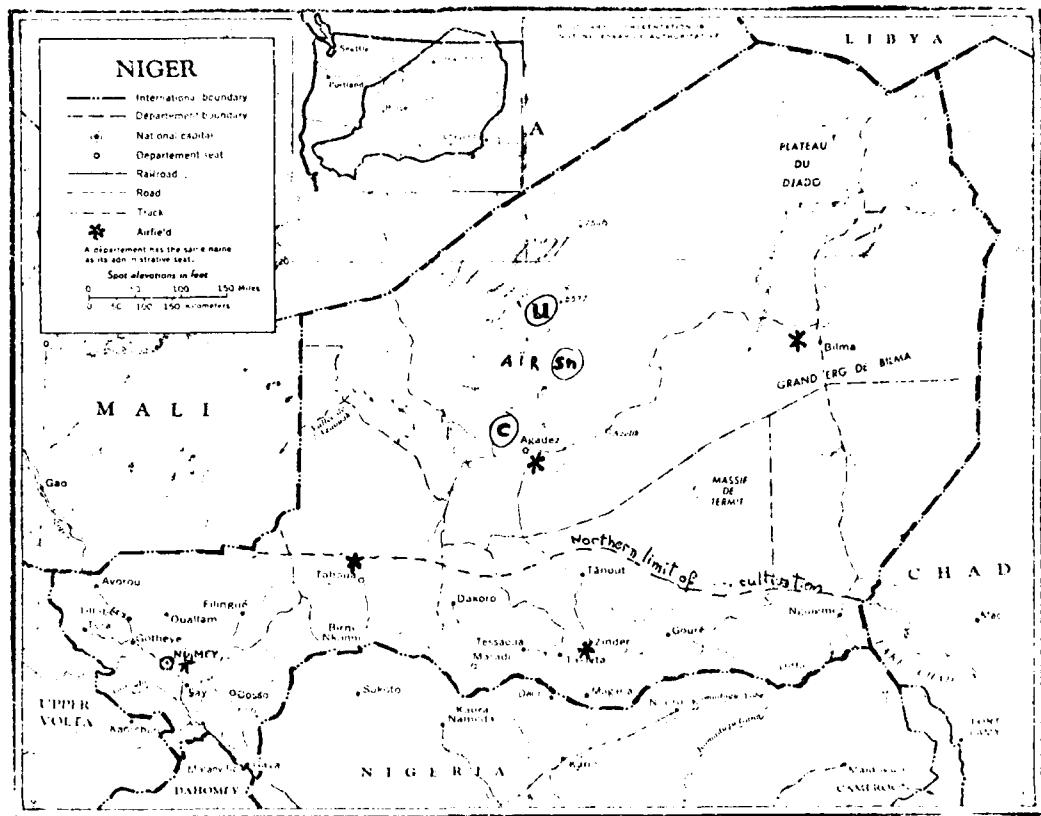
(The International Institute for Military Studies)

	Population (Million)	Armed Forces (Thousands)	GNP \$Billion	Def. Expend. \$Billion	Tanks	Guns	ATK & AA Weapons	Aircrafts (Combat)
Libya	3	53	19	0.4	2400	600	ATK 3000 AA 450	287
Niger	5.5	2.2	1.5	0.024	--	--	ATK -- AA --	--

GEOGRAPHY

Niger is a landlocked country of 460,000 sq. miles which is twice the size of France and the tenth largest country of Africa. In the south, it is composed of a thin fertile strip bordering the Niger River. All the other parts are semi-desert or desert which are the main part of the Teneri Desert. A mountain range raises up in the northern part as an extension of Algerian Ahaggar and linked to Chad's Tibesti by high plateaus. This feature constitutes a natural barrier between Niger and Libya, but there is no such barrier between Niger and Chad.

A second barrier which is more important is formed by the Nigerian part of the Teneri Desert. A ground operation through Fezzan and then the Teneri Desert would require an enormous logistic support. But on the other hand, it would be very difficult for Nigerians to repel an enemy infiltration into the northern part of Niger.



POPULATION

The population is about 5.5 million people of whom 3.5 million are Moslem. They are mainly gathered in the southern third of the country. The north is sparsely populated and the northeast is particularly uninhabitable. The overall density, 3.3 per sq. mile, compared with the high density in the south, 35 per sq. mile, reflects the absence of population in the desert area. There are about 3,000,000 people in the southern strip but only 52,000 in the northern area with a possible increase since the exploitation of uranium.

As in many other African countries, if not all, the population offers a wide ethnic diversity. More than 50 percent of the population come from the same roots (Hausa). Some Berberi live in the eastern part and Tuareges around Agadez most of whom are converted to the Janussiya sect. At the

present time, the Hausa sect is dominating in the political area. There is no nomad problem. Algeria and Niger have adopted the same politics considering that there must be no more advantages.

ECONOMY

The only wealth of Niger, uranium, could attract Libya. Before 1970, Niger was one of the world's least endowed countries. It was transformed by discovery from the air of large exploitable deposits of uranium and some other mineral resources (coal, iron ore). Some people speak now of Niger's entering the economic takeoff stage with stupifying prospects in the future.

At this time, Niger is one of the West's largest uranium exporters and its economy balance is positive. In particular, France is strongly interested in its uranium. However the uranium prices are going down (prices for 1973 were 76×5 , for 1980, 76×3) which could be a disaster for Nigerian economy and lead to an unstable situation or a choice of more comprehensive partners since some speak of manipulation.

PRESENT-DAY SITUATION

As early as 1974, Libya was involved in Niger taking advantage of an old president, Hamani Diori, to conclude outstanding secret accords including both military, social and economic benefits.

- Arabic would become official language.
- Mosques should be built.
- Niger should authorize broadcast on Libya. That represented an actual colonization of Niger by Libya.

As soon as the secret accords were known, a very strong nationalist

reaction occurred led by LTC Seyni Kountche who took over the power, set up a strong and regional regime and annulled most of the previous agreements.

At the present time, the Niger situation is in many respects narrowly bound to Libyan behavior:

-- Many unemployed Nigerians work in Libya. Some of them could have been enlisted by force into the Arabic legion.

-- Libyan broadcasts from Fezzan are listened to by a large proportion of Niger's population including students.

-- Outside opposition led by officers who were authors of the unsuccessful coup in 1976 and were welcomed by Libya.

LIBYA AND NIGER

On both sides after a long period during which the disagreements were not dealt with in an open way and despite the attempted coup in 1976 against Seyni Kountche, the opposition has become clear and public since 1980 and the war of words more violent. After the meeting in Conakry of the West African heads of state involved in the restructuring of the Niger River Authority in mid-November, Niger became outspoken in its criticism of Libya calling Qaddafi a false brother and claiming that "Niger will not be Chad." Sales of uranium to Libya, long one of Niger's reliable customers, were also ended.

Qaddafi answers that Niger will be second in line after Chad and proceeds with his involvement in Niger (student strikes by the end of 1980 in Zinder, active propaganda vis-à-vis nomads, etc.), raises specter of cutting off aid to Niger and broaches the subject of thousands of Nigerian workers who earn their living from working in Libya.

On the other hand, Libya, like in Chad, sent troops several years ago to occupy an oasis on the border despite Niger's protest. It claims 200 sq. miles of the northern Niger including some of the uranium bearing land around Djado taking advantage of a very confused situation from six border revisions between 1898 and 1955.

Niger cannot of itself offer any resistance against Libya but its strength comes from:

-- Its good relationship with many countries interested in its independence:

- France with a strong axis Niamey-Paris despite the fact that France did not react when Libya entered Chad. France reportedly would have guaranteed, as well as Algeria and Nigeria, direct military assistance should Libya attack Niger. French troops have been sent to reinforce the mining region of Arlit (uranium).

- Algeria that needs an access to Nigeria in order to attract commercial traffic by a road between Nigeria and the Mediterranean Sea.

- Nigeria and all the states crossed by Niger River.

-- Its size. Despite its small armed forces, should Libya attack it would have to insure its own security along roads, on the airfields, around its supply centers and in hostile country that could lead to a dispersion of manpower out of proportion with Libyan capabilities.

-- Its popular support. After the Libya-Chad merger, Niger demonstrated a great unity: anti-Libyan demonstrations by trade unions and women, traditional leaders, including the sultans of Zagadez and Zinder, and representatives of Tuaregs met President Kountche to assure him of their support.

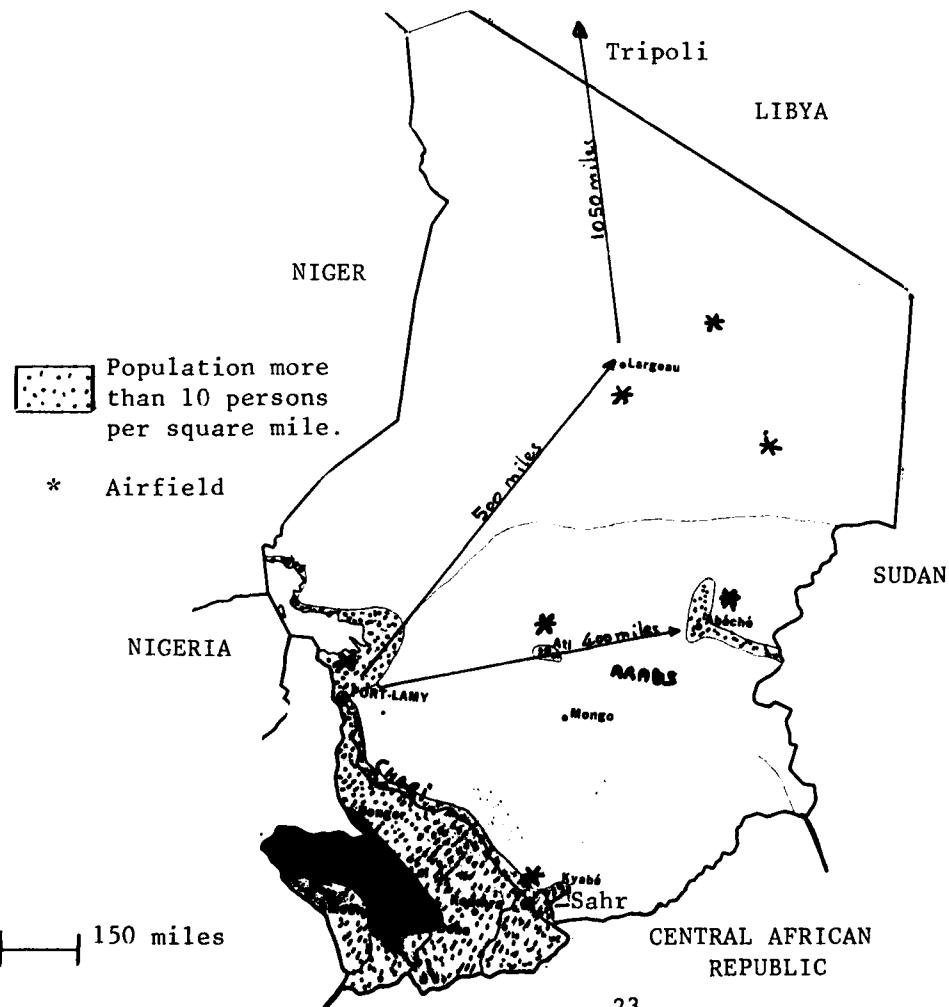
CHAPTER VI

CHAD

THE MILITARY BALANCE 1980-1981

(The International Institute for Military Studies)

	Population (Million)	Armed Forces (Thousand)	GNP \$Billion	Def. Expend. \$Billion	Tanks	Guns	ATK & AA Weapons	Aircrafts (Combat)
Libya	3	53	19	0.4	2400	600	ATK 3000 AA 450	287
Chad	4.5	5.4	0.926	0.222	--	--	ATK -- AA --	--



GEOGRAPHY

Twice the size of France, Chad is a landlocked country mostly composed of desert area. It lacks both internal and external communication. It is 900 to 1500 miles from the Atlantic Ocean. The climate and soil of Chad precludes any possibility of growing rich export crops and no great mineral wealth has been discovered despite some hopes of exploitable deposits in Tibesti.

POPULATION

The population of Chad is very fragmented and ridden by tribal and other antagonisms. The indigenous Negro population were overwhelmed time and time again by waves of white or mixed blood Muslim invaders coming from north or east who Islamized a majority of the local people. Some powerful states decimated their Negro neighbors by slave raids. The memory of this slavery can still be seen in the bitter hostility felt by Negro-Chadians towards their former Arab masters.

Chadian population is characterized by a diversity in tribes, color, religions, occupations, languages. It is mainly gathered in the southern part between Chari River and Cameroon Border. The northern half is nearly uninhabited (less than 1 person per sq. mile. Thus, Chad appears to be a country without a possibility of recovering good health for a long time. In such a situation, the extremist movements can be developed anywhere.

N'Djamena is occupied but N'Djamena is not Chad, and the conquest of a territory twice the size of France with 5,000--even 10,000--men with modern weapons could be quite an undertaking. If these movements happen to develop, the one fact of staying in Chad with a logistic support from Tripoli would be quite an enterprise.

ECONOMY

Chad's potential is very limited because of its geographical position and its climate. Road building and maintenance is easy in central and eastern part but very difficult in the richest region of the Chari River and south of Chari River because of their extensive seasonal inundations (June to November). The four possible outlets require at least two or three different transportable means (road, river, air).

PRESENT-DAY CHAD

It does not seem useful to repeat recent events well known by everyone. In the present time, a merger has not yet been entertained by Chadian population who are shocked by fifteen years of guerilla warfare and the very brutal end of the confrontation. This merger recalls two former Libyan similar experiences when neither Bourguiba nor Sadat could resist the Qaddafi objurgation, but not one was actually realized in action.

The difference is that Chad needs aid and the border between both countries is opened. Thus, Libya can "occupy" Chad, at least N'Djamena, even if the Libyan troops' presence happens to be less and less visible following some bloody incidents. Nevertheless, Qaddafi's will can be perceived through several statements despite some declarations designed to calm fears. Jalloud, second to Qaddafi, states, "We shall leave Chad if we are asked to do so." but Libya considers Chad as a vital space and will leave only if they are driven away.

Some problems can arise in the near future and thus show that Chad's problem is not yet ended:

-- The country, destroyed by the civilian war and Libyan occupation is accustomed to guerilla warfare (fifteen years from its independence till now and twenty years from 1900 to 1920 before France pacified it). It could be organized to resist the merger towards which we do not perceive any move from now.

-- "Congress" and "popular committee" are not Toubou organization and could be not at all accepted by the people that claim the non-representativity of Goukhouni to decide the merger.

-- Lieutenant Colonel KaMougue, Vice President of United National Chad government, who assaulted N'Djamena, keeps the south (the richest part) under his control. He calls this merger an impossible wedding and could be favorable to a partition of the north and south.

-- The historical Frolinat (Front De Liberation Nationale) leader, Dr. Abba Siddick, stated that the Chadian people will reject being made a satellite and foresees an armed popular resistance (some skirmishes are reported around N'Djamena airfield by newspaper writers).

-- Hissene Habre, the loser, signed only a ceasefire. He is always a protagonist and could gather 5,000 well-trained soldiers between Tibesti and Quaddai, backed by Sudan (Egypt).

-- Numerous refugees are in Cameroon and Nigeria (100 to 150 thousand) and Niger (80,000) when Qaddafi cannot provide the skilled people necessary to rebuild the economy.

CHAPTER VII

NIGERIA

THE MILITARY BALANCE 1980-1981

(The International Institute for Military Studies)

	Population (Million)	Armed Forces (Thousands)	GNP \$Billion	Def. Expend. \$Billion	Tanks	Guns	ATK &AA Weapons	Aircrafts (Combat)
Libya	3	53	19	0.4	2400	600	ATK 3000 AA 450	287
Nigeria	80	146	35	1.7	114	32	ATK 76 AA ?	21

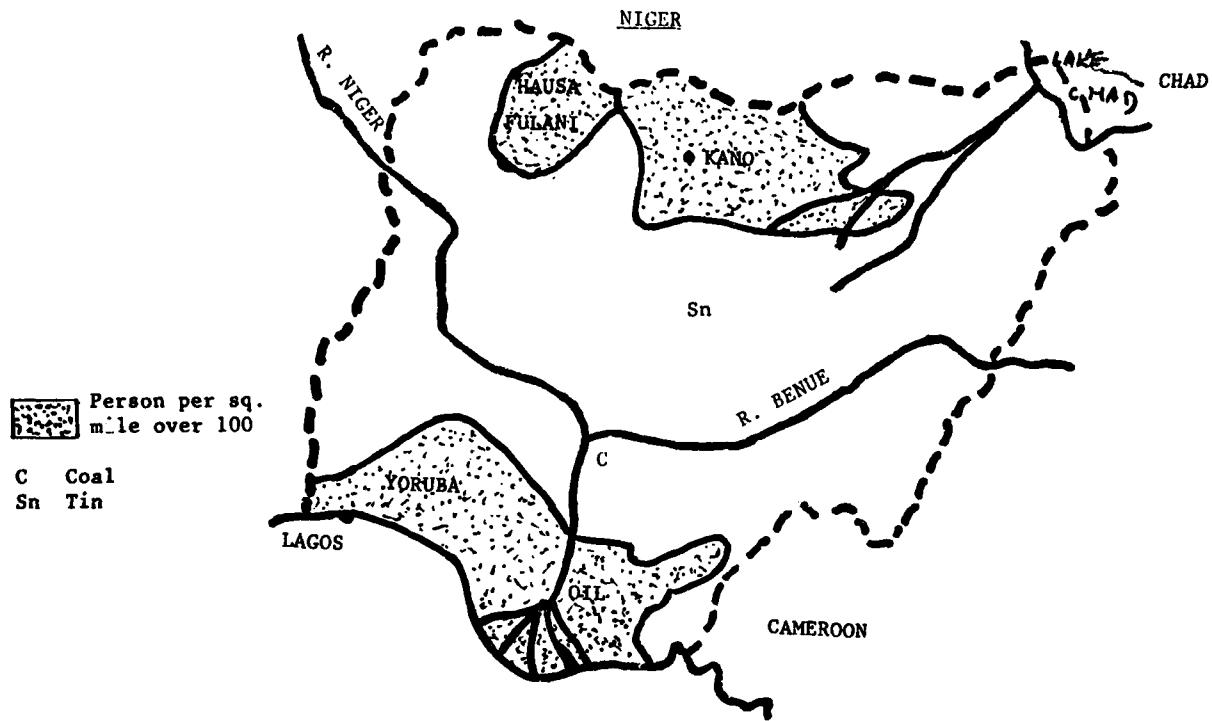
GEOGRAPHY

A country of 356,700 sq. miles and 80,000,000 people and four times the size of the United Kingdom, it has several extensive plateau surfaces. Seen from the viewpoint of this study, Nigeria can be divided in two parts.

-- One small part is composed of a plateau (very dry) which is one-sixth of the total area. It descends towards the Chad depression.

-- All the remaining parts, irrigated by the Niger and its affluent, Benue, are turned towards the Atlantic Ocean. Here the rainfalls and climate vary according to latitude.

There are two predominate seasons, rainy and dry. The length of each one varies a great deal from the north to the south. For example, in the south the rainy season lasts for nine months and in the far north only four and a half months.



While Nigeria is poor in indigenous food plants, its major wealth comes from minerals and in particular, the delta oil fields exploited in the late 1950s. Some other minerals are found such as tin ore, coal and natural gas.

POPULATION

The population is made of many ethnic groups with different customs, traditions, costumes, languages. Of 80,000,000 people, 38,000,000 are Moslem. Islam is the predominant religion in the far north while the south is predominantly Christian; although, Moslems outnumber Christians in some parts of the southwest. However, a great majority of Nigerians actually are pagans. Three major ethnic groups are the Ibos in the south, Yorubas in the west,

Hausa-Fulani in the north. These groups share less than half the population. Various minority groups are together numerically superior to these three groups. This population is more evenly dispersed throughout the country than in Niger, Tchad, Sudan. However, two important concentrations exist; the main one in the Niger delta and the other one in the north around Kano.

ECONOMY

Nigeria is often called the giant of Africa, both because of its population and its economical power. Its GNP (\$35 billion) is nearly twice that of the second in line in Africa (Libya \$19 billion). Natural resources are oil, columbium (used for steel alloys), coal, tin ore, natural gas. Oil represents 91 percent of its exports. Nigeria was the second largest supplier of foreign oil for the USA in 1978.

Its communications consist of two vital means. The rail network between desert region of the far north, central Savannah, and tropical rain forests and other parts are vital. They will be modernized and extended by 1985. Airfields are also very important for access to and from the outside world. Aircraft is often the only feasible mode of travel in the interior.

NIGERIA AND LIBYA

The relations between Nigeria and Libya have been severed since 1979 but especially since 1980 because of the seizure of Chad. Nigeria had an alliance fail between Libya, Chad and Nigeria and now gives its support to Niger. In 1980, Lagos government gave the Libyans 48 hours to close their embassy in the federal capital because of turning it into a peoples' bureau.

Some violent unrests with a religious character, Moslem fundamentalist,

took place in Kano, the important population concentration in the far north. No one could find out who initiated that.

Libyan aircraft many times violated the Nigerian border and reportedly some have used some Nigerian air bases and small Libyan contingents would openly station in two Moslem cities of northern Nigerian states in defiance of the Christian-dominated federal government in Lagos. Be that true or not, it indicates pretty well the diplomatic climate between both countries.

Having suffered a bloody war in 1965, Nigeria is recovering and presents, like many African countries, several possibilities of instability. But taking into account the size of its population and its armed forces and despite a poor armament compared with the Libyan one, it seems quite impossible Libya can try to conquer the whole of Nigeria.

However, an action on only the northern part can be possible considering the difficulties for Nigeria to repel an assailant so far from Lagos especially if he gets the support of some of the Moslem population. But the further to the south such an offensive should be developed, the more difficult it would become for the assailant because of the supply distance, rainy season, vegetation, popular resistance. Further, what would be the attitude of the USA and Algeria should such an eventuality happen?

CHAPTER VIII

DEMOCRATIC REPUBLIC OF SUDAN

THE MILITARY BALANCE 1980-1981

(The International Institute for Military Studies)

	Population (Million)	Armed Forces (Thousands)	GNP \$Billion	Def. Expend. \$Billion	Tanks	Guns	ATK & AA Weapons	Aircrafts (Combat)
Libya	3	53	19	0.4	2400	600	ATK 3000 AA 650	287
Sudan	18.4	68	6.19	0.250	160	170	ATK 30 AA 160	36

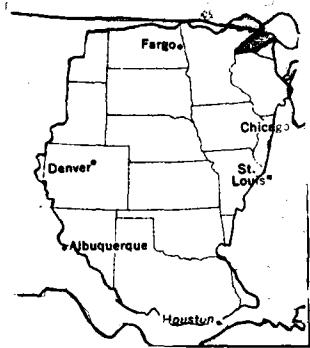
GEOGRAPHY

Sudan is the largest state in Africa, 980,000 sq. miles. The main geographical features are not very different from those of same latitude African countries except for one major point--the Nile River.

Sudan, North Khartoum, is linked to the republic of Egypt by the unifying Nile which determined the whole history of both countries. Neither of these countries can ignore the other. For what concerns Sudan, its inhabitants have always had to chose between three alternative policies:

- Domination by Egypt.
- Independence from their neighbor.
- Conquest of Egypt

Neither of the two countries can ignore the other and the justification for making a unified Nile Valley was for many years the *raison d'être* of Egyptian foreign policy.

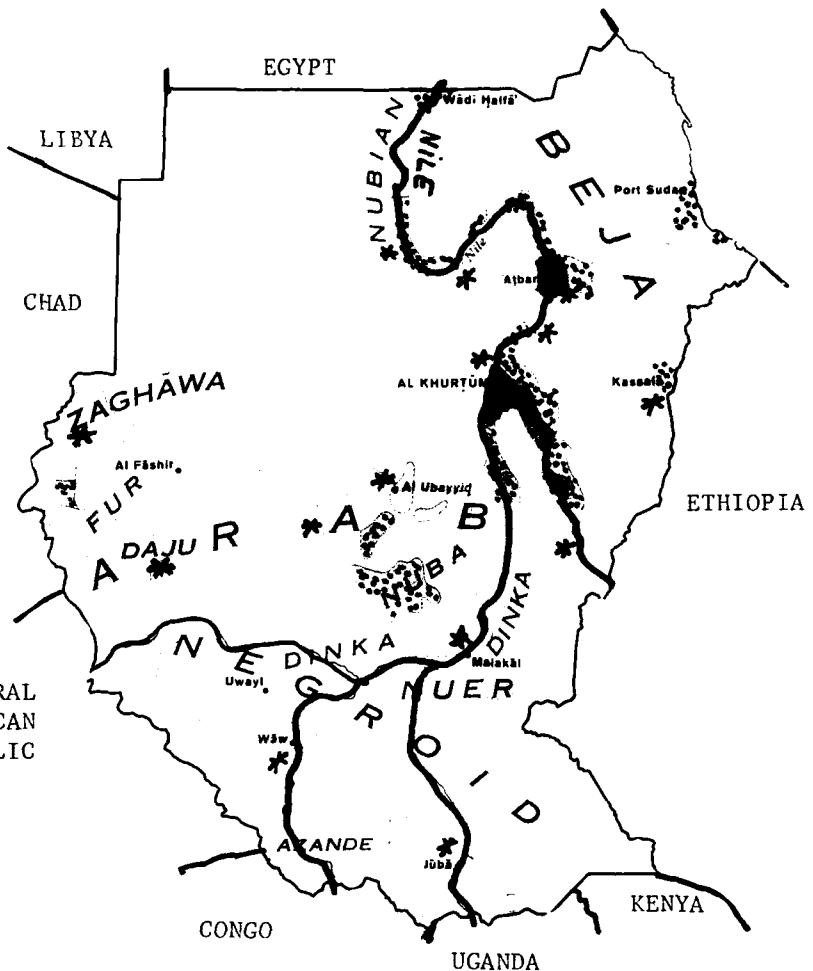


Population more than 10 persons per sq. mile

150 miles

* Airfield

CENTRAL
AFRICAN
REPUBLIC



POPULATION

Last census in 1973 gave 14,800,000 people with a high density mainly along the Nile and around Khartoum (800,000 people). Population of the northern part is mixed Arabic and African with an origin of nomadic or semi-nomadic. In the south, Nilotic people predominate and this different ethnic group creates some ongoing troubles.

ECONOMY

Sudan is mainly agricultural and has no mineral resources. Its major product is cotton. That makes it very sensitive to any major change of this

vital product. The railway system is well developed and provides good links with the most populated parts of the country, but the road system is poorly developed.

SUDAN AND LIBYA

Sudan seems to be of no interest to Libya except as a possible desire of prestige at any price. However, if we look at a map, we see that Sudan is surrounded by two Russian-backed countries, Libya and Ethiopia. Egypt is opposed to Libya and has rejected the Russians after a period of so-called friendship. The Nile is vital for Egypt who represents, furthermore, the only country in this area sympathetic towards Israel which is USA backed. The Russians could be attracted by a linkage of Libya and Ethiopia through a socialist Sudan. Egypt would be at the same time isolated from Africa.

On the other hand, the map demonstrates the distance between the departure point of a possible Libyan offensive and the possible targets through a hostile country.

Sudan has a clear consciousness of its weak points:

-- Surrounded by Libya and Ethiopia.

-- Heavy economical dependence on one major product.

-- Problem of southern Sudan.

-- Reach for a permanent constitution for the country. The president presently rules with an unnatural coalition and turns back to Egypt after a two-year break of diplomatic relations. Sadat expresses his concern on the effect of these new developments in Sudan, because he has traditionally regarded Sudan as an integral part of its own security system. The mutual defense pact signed since the unsuccessful Libyan-backed coup attempt

was against Nemery, Sudan President, in July 1976 will once again be in effect. They both are interested in that.

Egypt. Because of a direct interest on its south border, Sadat has indicated that he would not hesitate to put into practice the mutual defense agreements. He also stated that the Chadian-Libyan merger threatens Sudan and what threatens Sudan threatens Egypt.

Sudan. Because of its fragility on both political and economical levels, Qaddafi can use Chad as a base of operations mainly if Egypt-backed Sudan goes on to support Hissen Habre's rebellion. Anyhow, the climate remains very tense. A few months ago some violent demonstrations occurred in three Sudanese towns and a short time ago, fully equipped Sudanese troops were rushed to the increasingly tense border with Chad.

CHAPTER IX

TOOL OF LIBYAN EXPANSIONISM

HISTORY OF LIBYAN ARMY

This tool can have many different forms, economical, political, sociological; but the main tool will be the armed forces. They come originally from the Libyan Arab Forces (LAF) recruited by the British in Egypt at the beginning of World War II. Then two divisions of Cyrenaicans enlisted by the Italians fell almost intact into British hands. They joined the LAF; but because of the high technicality or mobility required by modern desert warfare, they were mainly used for auxiliary duties.

After World War II, the Janussi Army was reluctant to disband and a majority of its members arranged to transfer to the local police force. When Libya became an independent country, the veterans of the LAF formed the nucleus of the royal Libyan army from the police. Then, armed forces previously consisting almost entirely of tribal people began to be replaced by more skilled but politically less reliable city dwellers.

The king distrusted this armed force but was encouraged by the western allies to modernize his armed forces. He often kept ill qualified but loyal Cyrenaican officers in important command positions and organized forces according to regional and tribal lines with Bedouin forces being deployed in the politically more important areas including Tripoli and Benghazi.

The army's strength was 6,000 men plus a variety of armed police forces heavily equipped and the Cyrenaican defense force special guard. The strength of these latter two forces in 1968 was 14,000.

Most of the RCC officers in 1969 were from the lower strata of society. Their average age was 28. They were the first generation to grow up with a truly national outlook. They were imbued with a pure Nasserist dedication to the pan-Arab cause.

THE MODERN ARMED FORCES

After 1969, the armed forces were unified by incorporating most of the national security force and the Cyrenaican defense force into the army whose strength was thus tripled (20,000 men). The entire leadership of generals and colonels was dismissed or retired. One hundred other officers were retired. Janussi tribes were disarmed. By 1971, a civilian militia known as the popular resistance forces was created under the command of an RCC member.

Libya rescinded an earlier decree on conscription made in 1967. Now as then, this is a problem pertaining specifically to skilled labor not to manpower availability. The country with a birth rate of 3.8 percent a year is able to provide the raw manpower for armed forces.

Conscription would be unlikely to produce the economic difficulties it caused in 1967. On the other hand, it is unlikely to produce an adequate number of recruits with suitable background for mastering complex weapons systems.

In 1977, over one-third of the Libyan army would be used up simply in providing crews for its tanks. According to foreign sources, Libyan armed forces had at that time only 150 competent pilots for over 160 combat aircrafts. The normal minimum ratio is 2 pilots per aircraft.

STRENGTH OF THE ARMED FORCES
(Appendix V-A)

The situation can move so quickly that it is difficult to evaluate the real strength as regards materials. Here are the main figures given by The Military Balance 1980-1981: (Detailed figures are in Appendix V-B)

Total armed forces: 53,000 (can reach 100,000 with conscription)

Army	45,000
Navy	4,000
Air Force	4,000

Main units: 12 tk bns, 24 mech inf bns, 16 inf bns
2 AA arty bns (SCUD 8)
1 SSM bn (FROG 7)
20 Arty bns (5 with MRL)

Main materials:

Army	2600 tanks T55/55/62/72
	Some 600 guns
	3000 anti-tank gun weapons
	12 FROG 7, SCUD 8
	450 AA weapons

Air Force Some 310 combat aircrafts (plus some in storage)

Plus numerous materials on order.

Other figures come from different sources. For example, the Egyptian Chief of Staff has declared the USSR had provided Libya with: 2750 tanks, 2000 armored carriers, 386 bomber-fighters (Mig 25-27). These figures would have been confirmed reportedly by people near the Pentagon. This example is given only to show how difficult an actual evaluation is.

COMBAT VALUE OF THESE FORCES

Obviously these figures mean nothing if there is no one capable of operating these materials. Then it seems interesting to evaluate the Libyan armed forces through some examples:

-- Until Chad was captured, Libyan troops suffered many failures:

Uganda, spring 1979. One thousand soldiers were made prisoners by Tanzanians without shooting one round.

Egypt 1977 and 1978. Libyan troops were severely defeated and suffered heavy casualties; hundreds of soldiers, many tanks, helicopters and aircrafts.

Chad 1978. Oueddeis Goukouni's forces fought and severely defeated a Libyan invasion column in northern Chad.

Central African Empire. Libyan forces were overrun by French operation Barracuda.

-- No document mentions any foreign help during these different attempts.

CHAD SEIZURE

At this point, it is interesting to study more in detail how the Chad war was managed. This information comes from several newspapers both French and foreign ones.

For this operation the Libyan armed forces were reinforced by numerous foreigners--reportedly 1500 East Germans and some hundreds of mercenaries (paid \$600 to \$700 which represents a very high salary in this area). As an example, they used Pakistani pilots.

The details of the seizure are:

January 1978. Cuban pilots and advisers were seen around Sebma. A large prohibited area watched by Libyan soldiers is created. Military convoys would be directed to the Chadian Border. Six months later Hissene Habre confirms Cuban presence in the airport of Faya Largeau.

1979. Two transportation Chadian aircrafts and one Jaguar are downed by rebel forces.

From June 15, 1980. Setting up of logistics for four months. Units and materials are gathered in some bases in Fezzan desert 500 miles from Faya Largeau, and Aozu Strip where an air strip could have been built. Materials and oil depots are settled in Chad and a transit base is organized in Faya Largeau.

September 1980. "African Liberation Army" is put under the command of a Moslem Chadian. That could have been the Islamic Legion--about 1500 men.

October 1980. Big capacity air carriers bring supplies for 2000 men in the former French base Dougnia--40 miles north N'Djamena.

December 1980. France warns Libya and immediately Russia warns her against possible intervention. Libyan forces are estimated on the whole to be about:

- 100 aircrafts.

- 5000 to 7000 men organized in battalions of 350 men each composed of 3 companies.

- 30 to 50 tanks carried by trailers to Douema air base.

- light armored carriers Cascavel (Brazil), rocket launchers, Mortars 81, antitank guns 57 and cross-country cars.

December 8, 1980. First assault and failure of the attack.

December 13, 1980. Assault resumed with East German pilots having replaced some or all the aircraft and tank Libyan pilots (reportedly).

The general operation was covered by an action through Abeche and Ati to cut off Hissene Habre from his weapon supplies. The organization of this operation shows high professional skills, a good method by a prudent step-by-step approach. Each step was set up in a sure place and then the other one pushed forward afterwards.

The assault was a long battle with tactical envelopments. The only question was how to reduce a strong point. Therefore, the only necessary mean was fire power. It was provided by 30/50 tanks and aircrafts.

All these examples show that in the present day Libyan armed forces have to rely heavily on a foreign aid for both logistical support and organization and combat. This aid can be provided by mercenaries or by an official foreign aid.

How could such an enterprise be successful when carried out in hostile country without any ally inside this country. It is doubtful that the Soviet Union would have backed him with an active support in such an adventure.

CHAPTER X

INTERIOR LIBYAN SITUATION

An expansionist policy must get popular support to be achieved. It is necessary to examine the interior situation of Libya. Few unclassified official documents exist. The main sources of information are newspaper writers with all the restrictions thus required.

Libya should have 50 percent educated people by now. That can provide a strong popular support and an important man supply for military purposes. On the other hand, they can shift very quickly from one side to the other.

Young people outnumber the others in the population and fanatic young men are tempted by military adventure proposed by Qaddafi as "official" terrorists or within the armed forces. The principles of recruitment and training of the men and many unmarried women provide an outstanding propaganda means to maintain the revolutionary fire and to spread it all over the country.

Despite this enthusiasm Qaddafi has several causes of concern. Under his leadership much agricultural and economical progress was achieved. The per capita income has increased from \$1,700 (1963) to \$10,000 (1980), 200,000 houses were built and 400 million trees were planted. However, by his violence and his behavior he lost numerous supports from tradesmen and religious leaders. Several uprisings took place after 1969. In April, 1973, a popular uprising with unclear reasons is explained according to two assumptions. The one was Qaddafi's attempt to effect a spiritual and cultural regeneration which may not have been welcomed by conservative religious leaders, the commercial community, intelligentsia and the students. On the other hand, it could have been organized on purpose to destroy the opposition.

The most important cause of concern to the regime is the officer corps of the army itself. Several unrests or attempted coups took place:

-- In 1975, three instances of military unrest led to the arrest of at least 120 officers; first, a joint declaration by 39 officers in March; second, a planned coup by the chief of military transport in July; and third, a coup attempt involving the commander of the republican guard and about half of the members of the R.C.C. in August.

-- In January 1978, the long-time head of Libya's security and military intelligence service, who had planned several coup attempts against leaders from Morocco, Sudan, Egypt, was arrested with about one hundred officers and men.

-- In August 1980 in Cyrenaica, another officers' rebellion was quashed by Qaddafi's brother-in-law, Colonel Abdel Fatah Yunes. Many people were reportedly killed.

It is not possible to state the degree of likelihood of a coup against the present Libyan regime, but the possibility exists. The principal cause of dissatisfaction in the officer corps is the growing link with the Soviet Union, the waste of money both on the military and civilian levels and perhaps the almost total blockage of promotions.

Domestically, the regime has lost most of its earlier popularity. An opposition movement in 1970 of Libyan exiles in Europe began to smuggle anti-Qaddafi propaganda into Libya. Seven of the twelve historic leaders have died or fled abroad. All these problems can explain that the Qaddafi's position could become more and more uncomfortable and creates the need for him to find some military successes abroad. He cannot afford an important failure and thus has to be very careful in his enterprises to achieve success.

CHAPTER XI

POSSIBLE MILITARY ACTIONS

Taking into account only the Libyan military forces, without the interior and international political problems, it is now necessary to study what Qaddafi can do in sub-Saharan countries.

MANDATORY FACTORS FOR SUB-SAHARAN WARFARE

Such operations--1,500 miles from the main support base--requires at least four things:

- Skilled people are necessary to manage a very complicated offensive through and over the Sahara, to fight in very difficult conditions, to organize and carry out with a great precision a most difficult logistics including water supply.
- Very important means which are mainly, first, to start the operations and afterwards, to provide logistical support.
- Sufficient manpower to be able to last the necessary time required and to insure the security of all the sensitive points.
- Airfields, granted or gained, further and further into the enemy country.

LIBYA LACKS SEVERAL FACTORS

Libya has very few skilled men and has to rely on its mercenaries or the Russians for all the areas defined previously. It has the initial manpower with conscription but its 3,000,000 inhabitants don't provide great capabilities to sustain this strength for a long time. It has the material means mainly in respect to the air fleet with 5 Iliouchine 76 "Candid,"

6 C130 Hercules and 2 C140 Jetstar with a total transportation capability of 2,000 men on 3,000 miles. But the figure of 2,000 men does not mean anything. A great deal of this capacity should be used to ship some signals materials, the indispensable first-motorized or mechanized materials and heavy weapons, the command posts, and the minimum logistical requirements including, maybe, water.

By whatever means the first strength is carried (dropped), on an enemy airfield, it would be very vulnerable if not supported by a grand operation or if not discreet enough. However, such a commando action can be carried out with success in several parts of most of the African countries within the Libyan aircrafts' range.

MODES OF ACTION

Libya can work out a goal through three main modes of action.

General Warfare

The study of the Libyan campaign shows all the difficulties related with a desert warfare fought within a strip no more than 150 miles along the sea coast. A Libyan offensive against North African countries, and mainly Tunisia, could be of the same type. But against Niger, Nigeria and Sudan, it would be quite different. If the enemy forces for most of the sub-Saharan countries are not a problem, the actual enemy will be the terrain.

Such a warfare would first require the gathering of the forces in south Libya or in N'Djamena, Sahr or Abeche. The possible forces can be evaluated including draftees up to 20,000 or 30,000 men. By itself this operation would represent quite an exploit and would likely not be achieved without being detected by the superpowers. Then the offensive would be

started and developed through eight hundred miles in hostile country. It would soon meet with a guerilla warfare with all related security problems. Such an action could be launched by Qaddafi with great chances of an initial breakthrough, but the final success seems really problematical.

Limited Intervention

The second type of action could be a limited intervention like the Uganda operation. That means an airlift initially of 1,000 to 2,000 men with few materials on behalf of a friendly country requiring this help. The Libyan air fleet allows it this capability up to 3,000 miles if refueling capabilities exist on the final airport. The precedent intervention in Uganda showed clearly the risks of such an action. It is doubtful that a Russian or European-Eastern countries would agree to participate unless the success is guaranteed. However, a limited intervention can be carried out by only Libyan forces in many sub-Saharan countries.

Armed Intervention

Type Chad

This intervention supposes stronger forces than the preceding one, able to fight not only in a capital city to support a government but also to help one party to overrun the others. This is the most probable type of intervention but it presumes first a favorable situation in this country and mainly the free access to airfields. It fulfills the international requirements and allows a prudent but slow build-up in advance of the forces. The logistical requirements are important because of few, if none, of the African countries have the necessary support infrastructure for heavy and sophisticated materials. The multiplication of logistical depots increases the needs in material, men and security.

INTERIOR AND INTERNATIONAL CONDITIONS FOR A MILITARY INTERVENTION

By the end of this study it is easy to understand two things:

-- Qaddafi needed a success, political or military, after so many failures.

-- Such a success, if military, was totally improbable in North Africa and could be sought only in sub-Saharan Africa.

Chad was an easy prey, torn apart by different leaders and exhausted by a 15-year old guerilla warfare, given up entirely to tribal fights after the French forces left without any possibility of coming back. Qaddafi, allied with one of the two parties, has been able to organize methodically and pretty well cover his intervention with a maximum security for his troops and his logistics. It was a success until now.

Interior Conditions

Libya is pushed by its leader's ambition and megalomania. He is ready for many adventures but however, he is pragmatical enough to understand that:

-- His popular support is indispensable and in the long term relies on his successes mainly if his behavior tends to diminish more and more his interior and foreign audience.

-- His armed forces are not inexhaustible.

-- He cannot afford a long and bloody conflict even if his funds are inexhaustible.

-- He needs present-day Russia's support. His ideas and his ideal which he is building for Libya serves great purposes. What remains among them?--the building of a Sahelian state and the capability of undertaking again the Arab unification through Moslem countries of sub-Sahara. That is

the only open door left to him. If they are not opened by themselves, he can try to force them. He has the initial physical power of it with his powerful armed forces. Qaddafi will rely heavily on mercenaries and mainly on skilled people from allied countries.

International Conditions

These goals can be limited by many obstacles. The most obvious is the ground and climate but there are numerous others:

-- The western world could be more and more concerned by the threat to their raw material suppliers. Africa, south of the Sahara, provides the United States of America with raw materials which are scarce to the U.S.A.. They are cobalt 72 percent, manganese 51 percent, antimony 43 percent, copper 16 percent, cocoa, mahogany, long staple cotton more than 50 percent, much of gold, rubber, graphite, oil, and uranium. The U.S.A. may, therefore, take some appropriate defensive measures when asked by these countries. Then the opponent to Libya would no longer be a small and weak country but a big power or more--a coalition. According to her traditional policy, Russia could diminish both her support and Qaddafi's ambitions.

-- A.U.O. is very conscious of the vulnerability of each of the African countries and is opposed to any provoked instability. The Chad operation reinforced strong opposition against Libya all around this country.

-- Some very strong interior resistance can be deployed in case of a Libyan invasion. Any such resistance would be helped by the size of these countries, the knowledge of terrain and climate in the southern part of most of the countries threatened, which is quite different from the Libyan one and last, a long guerilla tradition in many areas.

CONCLUSION

Libya is confronted by many paradoxes:

-- Traditionally made up of tradesmen and discovering for the first time in its history prosperity and wealth, it got a conquering warrior leader.

Although he tries to organize in some areas the future of Libya, he wastes a lot of money in foolish and useless projects.

-- Geographically looking to the Mediterranean Sea, its wealth source, it is pulled to the south--wide, bare and resourceless.

-- Strongly anti-Soviet by its religious persuasion, it has to accept Russia as its only ally.

-- Without skilled people to handle all the necessary problems of expansion, it is launched in two different adventures, industrial and agricultural expansion and military expansionism. Most of the key posts are in foreign hands.

Exportation of revolutionary ideals is normal from a brand new country but by his behavior, Qaddafi lost most of his potential support and has to be bound with Russia, the only reliable weapon supplier.

As opposed to most of the Third World countries, Libya does not need the Soviet Union to survive. The Soviet Union needs Libya on the African continent but could get rid of it without strong damage to her policy. This alliance will remain as long as both interests will be convergent which means as long as they will answer Russia's and Qaddafi's ambitions.

In the present-day situation, Russia does not want any direct confrontation and can aim at different goals:

-- Surround and isolate Egypt and then perhaps provoke some unrest and revolution.

-- Search only oil fields control.

-- Try to take over South Africa through unrests and guerilla warfare.

-- Gain control of most of the western countries' raw material suppliers.

Qaddafi can agree with some of these goals but only as far as his own goals are concerned: Islam, Arab unity and a Sahelian state. When a strong disagreement occurs, the whole anti-natural character of this alliance will appear.

In history, geographical or economic paradoxes cannot survive for a very long time. Presently, Libya has a very limited capability of military projection power except to bring help to a so-called friendly country like Chad. It has the tremendous advantage to threaten all its neighbors but to be threatened by none of them. Thus, it has a relatively free hand in any direction until the time when it will go too far. Its capacity relies on mercenaries but they are expensive and primarily depends on Russia which could allow it some adventures either because she is interested in them or as a reward.

Thus, Qaddafi does not seem able to take over any of these countries, except perhaps a small country such as Cameroon, without his having received both Russia's help and interior help of the designated country. Without this help, he can only take over some parts of his neighbor countries to realize a ghostly Sahelian state based on some ethnic minorities in the northern parts of Niger, Nigeria and Chad. But it does not seem possible in any case that he could be able to extend this state as far as the western Sahara through Algeria or Mali thus conquering the whole of Nigeria.

However, any of those operations needs a very strongly backed base in both logistics and political consensus which is more and more difficult to get when extending the operations. On the ground, the strength necessary

would grow in an exponential way. Libya is presently Qaddafi but such regimes are not everlasting. The actual long-term problem is not Qaddafi but his successor. Through him Libya will demonstrate if it has an actual expansionism or whether it needs to stop and rest in order to organize itself as a developing and developed country.

One thing could disturb deeply the whole problem--acquisition of nuclear weapons by Qaddafi. Then that will be no longer a Libyan problem but a worldwide problem.

BIBLIOGRAPHY

BOOKS

1. Europa Publications Limited. The Middle East and North Africa 1979-80. Twenty-sixth edition. London: The Stanhope Press, 1979.
2. Hill, Russell. Desert War. New York: Alfred A. Knopf, 1942.
3. Institute for the Study of Conflict. Libya's Foreign Adventures. ed. by Brian Crozier. Conflict Studies No. 41. London: December 1973.
4. International Institute for Strategic Studies. Strategic Survey 1980-1981. London: 1981.
5. US War Department. General Staff, G2. The Libyan Campaign, November 1941-January 1942. Campaign Study, No. 1. Washington: 25 August 1942.
6. Nyrop, Richard F., et al. Area Handbook for Libya. Washington: US Government Printing Office, 1943.
7. Schwarz, Frederick A. O. Nigeria, The Tribes, the Nation, or the Race--The Politics of Independence. Cambridge: M.I.T. Press, 1965.
8. Thompson, Virginia and Adloff, Richard. The Emerging States of French Equatorial Africa. Stanford: Stanford University Press, 1960.
9. Udo, Reuben K. Geographical Regions of Nigeria. Berkeley: University of California Press, 1970.
10. Ware, Lewis B. The Maltese-Libyan Entente in the Mediterranean Basin. Maxwell Air Force Base: April 1977.

PERIODICALS

MONTHLY

1. Carrere D'Encausse, Hélène. "L'urss et L'Afrique de la Dérente a la Guerre Fraiche." Politique Internationale. Automne 1978.
2. Journal of Modern African Studies. February 18, 1980, pp. 181-200.
3. Paris, Henri. "L'action Récente de Sovietiques en Afrique." Revue de la Defense Nationale. Novembre 1980.
4. Rondot, Pierre. "Libye du Coup d'Etat du 10th Septembre 1969 au Gouvernement des Masses." Revue de la Defense Nationale. Septembre 1979.

5. Rondot, Pierre. Revue de la Defense Nationale. Janvier 1981, p. 171.
6. Shuton, Z (Colonel). "In Deserts and Mountains." Soviet Military Review. November 1980.
7. Taton, Robert. "A Touts et Faiblesses de l'Expansionisme Libyen." Europe D'Outre-Mer. Février 1981.

WEEKLY

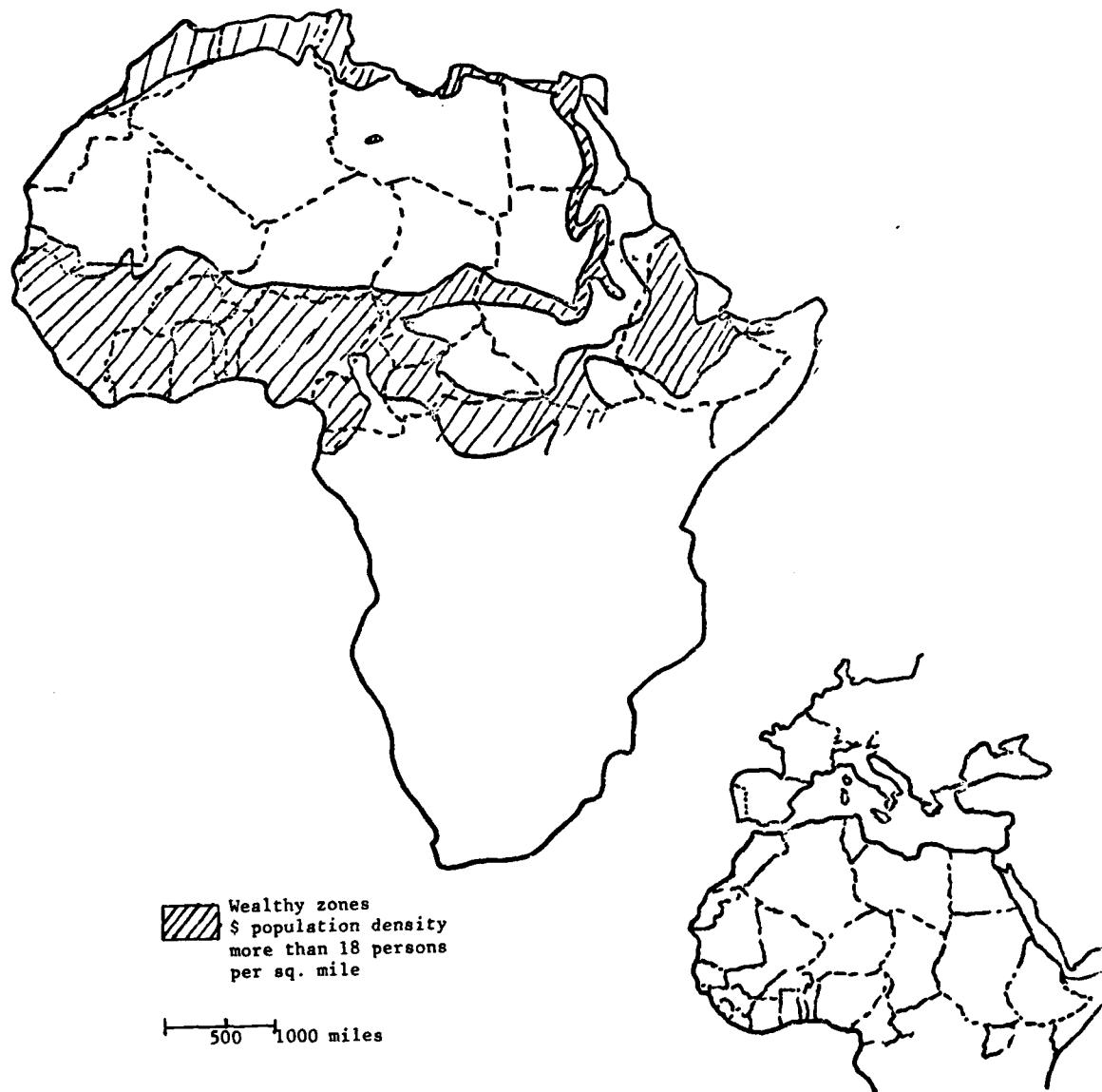
1. "Après le Chad Khadafi Inquiète Toute l'Afrique." Figaro Magazine. Janvier 1981.
2. Bief, Louise. "Sudan's Leader Set to Resume Ties with Egypt." Christian Science Monitor. April 1981.
3. Droit, Michel. "La France à-t-elle une Politique Africaine?" Figaro Magazine. Janvier 24, 1981.
4. d'Epenoux, Christian. "Les Couplots de Kadhafi." Express. June 19, 1978.
5. Godsell, Geoffrey. "Libyan Intervention in Chad Opens Pathway for Soviets." Christian Science Monitor. December 23, 1980.
6. "L'horrine clé de la Stratégie de la Reciprocité menée par Mr. Reagan-- le President Sadate." Valeurs Actuelles. Février 16, 1981.
7. "Le Khadafi Korps." Valeurs Actuelles. Janvier 1981.
8. "Libya and Chad Propose Merger." The Weekly Review. January 9, 1981.
9. "Libya Scmock Effect." The Weekly Review. January 23, 1981.
10. "Libya's Ambitious Qaddafi Focuses on Troubled Chad." Christian Science Monitor. December 17, 1980.
11. Mannoni, Eugene. "Le Danger Khadafi." Le Point. February 11, 1980.
12. Mariantoni, Alberto. "Khadafi, le Grand Traque." Le Point. June 16, 1980.
13. d'Ormesson, Jean. "Un Oventurier des Temps Moderne." Figaro Magazine. Janvier 17, 1981.
14. "Qaddafi Plan for Chad Merger Sparks Alarm." Christian Science Monitor. January 1981.
15. "Qaddafi Threat in Africa." Voice of Africa. January 1981.
16. El Thamy, Olfaf M. "Egypt Sees Threat to Sudan after Libyan Push into Chad." Christian Science Monitor. January 23, 1981.

DAILY

1. "Africa Leader Assails Libyan Involvement in Chad's Civil War." Washington Post. December 24, 1980.
2. "Attention il tue." Jeune Afrique. June 25, 1980.
3. "Black Africa Outraged by Qaddafi's Chad Adventure." New York Times. March 2, 1981.
4. Cooley, John K., and Kaufman, Lisa. "African Leader Assails Libyan Involvement in Chad's Civil War." Washington Post. December 24, 1980.
5. Danes, Desmond. "Gambia Booting the Libyans Out." New African. December 1980.
6. Darcourt, Pierre. "Ces Douze Generaux qui Destabilisent L'Afrique." Figaro Magazine. August 3, 1978.
7. Decraene, Philippe. "La Montée du Peril Libyen." Le Monde. Janvier 9-10, 1981.
8. "France to Boost Military Presence in African States." Wall Street Journal. Monday, January 12, 1981.
9. "Gadaffi's Sahara Dream." New African. December 1980.
10. Kolvent, Ronald. "Libya Says It Will Unite with Chad." Washington Post. January 6, 1981.
11. "L'Afrique Penetrée." Jeune Afrique. February 27, 1980.
12. "La Libye Vent Rassurer." Figaro Magazine. February 16, 1981.
13. "Le Chad a l'Heure Libyenne." Figaro Magazine. February 24, 1981.
14. Lewis, Michael. "Gaddafi's Empire Building Angers French." Standard Paper (Nairobi). February 2, 1981.
15. "Libya Plants its Revolution in Chad." Washington Post. January 8, 1981.
16. "Libya Prepares a Coup in Gambia." The Standard. January 26, 1981.
17. "Libya Provokes Niger to Vigorous Protest." New African. December 29, 1980.
18. "Niger Needs Outside Help to Fend off Qaddafi's Territorial Ambition." Washington Post. March 26, 1981.
19. "Nigerians Seek to Get Libyans Out of Chad." Washington Post. March 20, 1981.
20. Redmont, Dennis. "Gaddafi's Unity Goal Unrealized." Nation Paper. January 1981.
21. Ross, Jay. "U.S. Clears Way for Military Aid to Somalia." Washington Post. January 16, 1981.
22. Rubin, Barry. "Disorder in the Middle East." Wall Street Journal. Tuesday, December 16, 1980.
23. "Sadat Displays Concern Over Libya's Growing Presence in Chad." Washington Post. January 16, 1981.

APPENDIX I

AFRICA



APPENDIX II

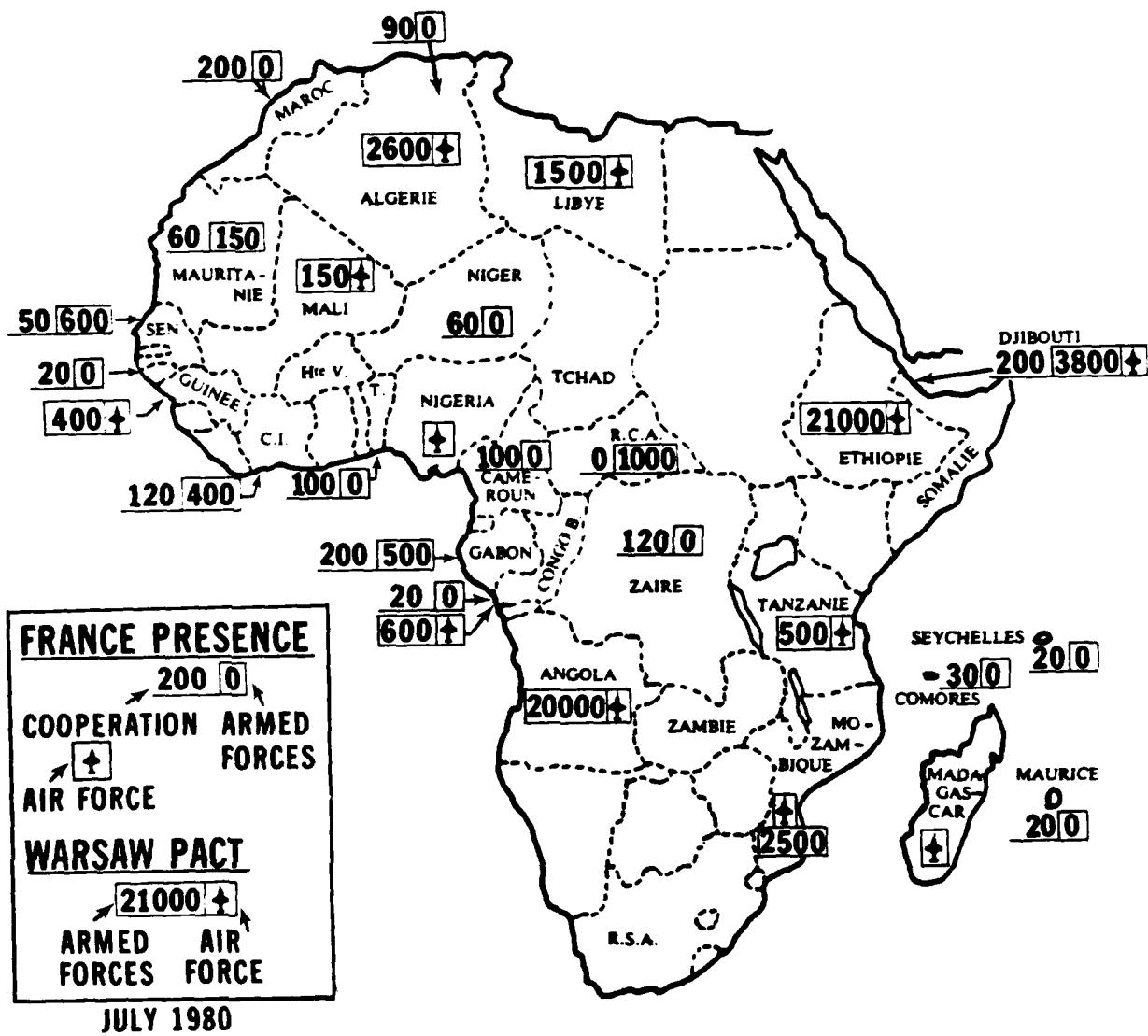
DATES	EVENTS
About 600 B.C. 250 B.C.	Greeks colonize Cyrene. Tripolitania conquered by Numibia.
643 A.D.	The Caliphe of Omar, the conqueror of Egypt overran the country as far as the Fezzan and Tripoli.
643-670	Arab expedition fiercely resisted by the Berbers. The majority of the Berber rapidly embraced Islam.
711	An outlet for their turbulence was found in joining them with the Arabs in the invasion of Spain.
Until 800	Continual rebellion.
972	The Shi'ite Fatimid Dynasty conquered Egypt from Tunisia.
1049	The Zirid Amir, governor of part of Africa including Libya, "Ifridiya" returning to orthodox Sunnism and acknowledge the sovereignty of the Caliph of Bagdad. The Caliph of Egypt sends against Libya two nomad Arab tribes. This invasion was a final catastrophe.
1510	An expedition sent by Ferdinand the Catholic takes Tripoli. The people outside the cities resisted the Spanish with Ottoman encouragement.
1530	Lordship and defense of Tripoli is confided to the future Knights of Malta.
1551	The Ottoman, Siman Pasha, reduces Tripoli and forces the Knights to capitulate. Organization of Ottoman North African possessions into three regencies. The one of Tripoli including Cyrenaica and the Fezzan.
1711	A local notable is proclaimed Dey and makes him recognized as Pasha by Ottoman Sultan. For the first time, Libya has some sort of autonomous existence.
1835	Through fear of the extension of French power in Algiers and Tunis, the Sultan of Constantinople decided to reoccupy Libya.

DATES	EVENTS
1835-1900	Decline of the Ottoman Empire. The towns alone are held by the Turks. This period is marked by the diffusion of Sanussi influence. The Sanussi are a religious brotherhood founded by one Muhammad Ibn Ali al Sanusi who settled in Cyrenaica on Jebel Al Aichdar in 1835.
1855	The Sanussi headquarters are transferred to Jaghbub.
September 29, 1911	Italy declares war on Turkey and Italian troops land at Tripoli on October 3. The Turks joined by the Libyans withdraw inland.
October 18, 1912	Turkey defeated in the Balkan sign a peace. From this treaty the Libyans should be allowed "administrative autonomy."
	Most of the Tripolitanians submit but the Sanusiya all over the country refuse to yield.
1914-1918	Turkey and Germany send by submarine arms to Libya and set an organization designed to tie up Italian forces in Libya and British forces in the Western Desert.
1918	Truce between Italians and Tripolitanians.
1920	Italians started to colonize Libya.
1922	Advent of fascist power in Italy.
1922-1925	Count Volpi, governor of Tripoli, pacifies the Province of Tripolitania. Cyrenaica keeps up the struggle.
	Italians realize that the only effective policy is to deprive the Sanusiya of their bases, the oases of the South.
1925-1929	Occupation by the Italians of the Oases.
1930	A barbed-wire fence was erected along the frontier of Egypt.
1942	Occupation of Cyrenaica and Tripolitania by a British military administration and Fezzan by French forces.

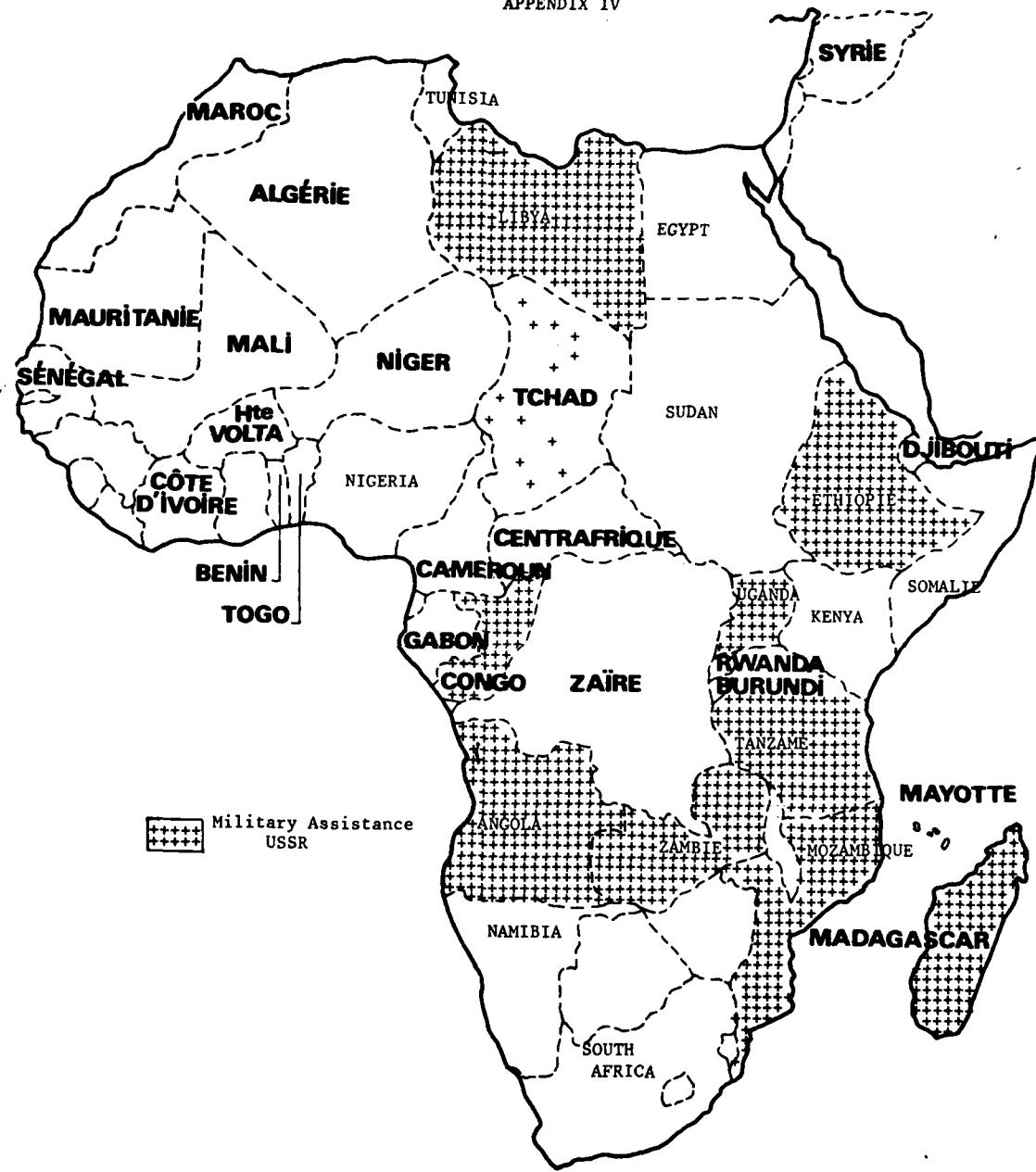
DATES	EVENTS
December 24, 1951	Independence of Libya as an independent united kingdom with a federal constitution.
1953	Libya joins the Arab League.
1959	An oil field is discovered in Cyrenaica.
April 27, 1963	Libya becomes a military state.
1967	Six-Day Arab-Israeli War. Serious disturbances in Tripoli and Bengazi inspired by Egyptian propaganda.
September 1, 1969	Military coup.
1970	British and U.S. military establishments are removed.
1971	Creation of Arab Socialist Union (A.S.U.).
1972	Federation of Arab republics come into existence (Egypt, Libya, Sudan).
1973	Occupation of Aozou Strip in Chad.
July 1973	March on Cairo to bring pressure to bear on the Egyptian government in order to translate in facts the Federation.
1 September 1973	This federation comes into effect but soon falls apart following the 1973 Arab-Israeli war.
April 1973	Qaddafi launches a cultural revolution.
May 1973	Presents his "Third International Theory."
13 January 1976	Union of Libya and Tunisia. Was postponed almost immediately.
July 1977	Frontier clashes between Egypt and Libya.
December 1981	Libya helps Goukhouni Woddei to take over the control of Chad.
January 1981	Merger between Libya and Chad.

APPENDIX III

AFRICA



APPENDIX IV



ARMED FORCES: Comparison Between Libya and Sub-Saharan Countries

APPENDIX V-A

Country	Population (Million)	Armed Forces (Thousand)	G.N.P. \$ Billion	Def. Expend. \$ Billion	Tanks	Guns	ATK &AA	Air- crafts (Combat)
Libya	3.0	53/80	19	0.4	2400	600	AA ATK 3000	287
Algeria	19.5	101	32	0.7	600	745	AA ATK 230	278
Tunisia	6.4	28.6	6.99	0.114	60	50	AA ATK 4.5	14
Egypt	40.5	367	16.5	2.2	1850	2100	AA ATK 2800	363
Sudan	18.4	68	6.19	0.250	160	170	AA ATK 30	36
Cent. Af. Rep.	2.0	1.9	0.565	0.0135	--	--	--	--
Nigeria	80.0	146	35	1.7	114	32	AA ATK 76	21
Niger	5.5	2.2	1.5	0.024	x	x	x	--
Chad	4.5	5.4 +6?	0.924	0.022	--	--	--	--

APPENDIX V-B

ARMED FORCES--LIBYA

THE MILITARY BALANCE 1980-1981

(The International Institute for Military Studies)

Population: 2,933,000.

Military service: conscription.

Total armed forces: 53,000.

Estimated GDP 1979: \$19.0 bn.

Defence expenditure 1978: 130 m Libyan dinars,
(\$448 m).

\$1 = 0.296 dinars (1979), 0.290 dinars (1978).

Army: 45,000.

12 tk bns.

24 mech inf bns.

1 National Guard bn.

2 arty, 2 AA arty bns.

1 special forces gp.

1 SSM bn.

2,400 T-54/55/60/-72 med tks; 200 PRDM-2,
100 *Sa'adat*, 300 ET-9 *Cassevel* artd, 140 *Ferret*
scout cars; 250 BM/7 APCs, 900BT R-40/-50/-60,
OT-62/-64, Fiat 6414 and M-113A1 APCs; some
660 M-101 105mm, 122mm, 120mm, 152mm
towed, M-1974 122mm and M-109 155mm SP
how; 250 D-11 107mm, BM-21/RM-70 122mm
and M-51 120mm SPs; 106mm recn; 450 82mm,
120mm, 160mm and 230mm mort; 3,000 *Vigilant*,
Milan and *Sagger* ATGM; 12 FROG-7, 30 Scud-B
SSM; 450 23mm, 30mm, 140/70, 57mm towed
and ZSU-23-4 SP AA guns; SA-7/-9 SAM.

(On order: 200 *Lion* (*Leopard* I) med tks, Fiat 6616
armd cars, 200 *Urutu* APC.)

Navy: 4,000.

3 ex-Sov P-class submarines.

1 *Vosper* Mk 7 frigate with *Seacat* SAM (being
refitted with *Aspide* SAM).

1 *Vosper* 440-ton corvette.

14 FAC(M): 2 *Combattante* with *Otomat* SSM, 9
ex-Sov *Osa-II* with Styx SSM, 3 *Susa* with SS-12
SSM.

4 *Garian*, 6 Thorneycroft large patrol craft.

1 Thorneycroft coastal patrol craft.

2 PS-700 LST, 3 *Pohnochny* LCT.

1 LSD (log spt/headquarters ship).

(On order: 3 *Daphne*-class subs, 4 *Wadi M'ragh*
corvettes with *Otomat* SSM, 8 *Combattante* II
FAC(M).)

Bases: Tripoli, Benghazi, Darna, Tobruk,
Buraygah.

Air Force: 4,000; some 287 combat aircraft.*

1 bbr sqn with 17 Tu-22 *Blinder A*.

1 interceptor sqn and 1 ocu with 50 MiG-23
Flogger E, 35 MiG-25 *Foxbat* A, 20 MiG-21.

4 TCA sqns and occu with 30 *Mirage* IIIC, 10 IIIB,
40 5D/DE, 10 5DD, 50 MiG-23 *Flogger* F.

1 recce sqn with 10 *Mirage* IIIR, 10 5DR, 5
MiG-25R/U (Soviet crews).

2 trg sqns with 58 *Galeb*.

2 tpt sqns with 7 C-130H, 1 Boeing 707, 9 C-47,
1 Il-76, 14 DHC-6, 9 F-27, 1 *Falcon*, 2 *Jetstar*,
1 *Corvette* 200, 2 *King Air*.

Trainers incl Tu-22 *Blinder* C, 6 *Mirage* F-1BD, 2
Mystere 20, 5 MiG-23U, 30 L-39, 12 *Magister*,
Falcon ST2, 170 SF-260S.

4 hel sqns with 10 *Alouette* III, 6 AB-47, 5 AB-206,
1 AR-212, 8 *Super Frelon*, 20 CH-47C, 12 Mi-8,
26 Mi-24.

AAM: AA-2 *Atoll*, R-550 *Magic*.

3 SAM bdes with 30 *Crotale*, 300 SA-2/-3/-6 SAM.

(On order: 32 *Mirage* F-1AD/LD fighters; 20
G-222, 10 Twin *Otter* tpts; 90 SF-260 trainers;

1 AR-212, *Gazelle*, 1 AS-61A hel; Super 530
AAM.)

APPENDIX VI

LIBYAN AIRLIFT CAPACITIES

*Total Capacity: 7 C130, 1 707, 9 C47, 1 IL76, 14 DHC6, 9 F27^{xx}

= 1,166,947 lbs.: 1.167 S/Tons

Requirements for 4 squadrons support:

Settlement of 4 squadrons:	1,400 S/Tons
Daily resupplies:	520 S/Tons/play
Maximum sorties:	80,000 gallons

Requirements for American units:

1 separate brigade:	16,836 S/Tons
4,890 men	
1 separate infantry brigade:	7,327 S/Tons
5,194 men	
1 separate light infantry brigade:	3,404 S/Tons
4,083 men	

Supplementary requirements for a desert warfare:

Water: average of about 20 liters per American soldier
for army (drinking, hygiene, food vehicles, medical, etc.)

Let us suppose that the average for Libyan armed forces
should be 15 liters per man per day.
5,000 men: 82 S/Tons/day

Supplies: Food, ammunition, gasoline, reapsairs, etc.

*These figures show clearly the limit of the capacities of the Libyan armed forces to first launch an action (but it can be prepared ahead of time); and second, to sustain the forces that should be done on a daily basis.

xx(plus civilian aircrafts not taken into account,. This number could be balanced with the attrition rate of the military aircrafts)

DISTRIBUTION

1. French Embassy

Monsieur le Général de Brigade
Attaché Militaire
1759 R Street, N.W.
Washington, DC 20009

2. Director J-5 (Plans and Policy)
ATTN: Middle East/Africa Division
Office of Joint Chiefs of Staff
Washington, DC 20310

3. Inter-American Defense College
Chief of Studies
Ft. McNair
Washington, DC 20319

4. Colonel William T. Leggett
Secretary/Chief of Staff
US Army War College
Carlisle Barracks, PA 17013

5. Office of the Secretary of Defense
International Security Affairs-NESA
The Pentagon, Rm 4D765
Washington, DC 20301

6. Colonel Jacques Pons
TRADOC (French Liaison Office)
Ft. Monroe, VA 23651

**DATE
ILME**